

**In the Claims:**

Please **cancel** claims 49 and 50 without prejudice.

Please **replace** claims 40 with the following **amended** claim that has the corresponding number.

40. (Twice Amended) A computer program product for mapping a plurality of cells from a plurality of different cell lines after applying a manipulation to said plurality of cells, based upon a statistical analysis of a morphological value, said computer program product comprising:

code for capturing a morphological value from said plurality of manipulated cells for each of said plurality of different cell lines;

code for assigning a degree of presence for each of said morphological values;

code for storing said degrees of presence;

code for producing a statistical profile of said manipulated cells by statistically analyzing the morphological values or the degrees of presence thereof and

code for mapping said plurality of manipulated cells based upon said statistical profile,

wherein

said morphological value is derived from a first component of a cell and a second component of said cell and wherein said morphological value is one or any combination of a cell count, an area, a perimeter, a length, a breadth, a fiber length, a fiber breadth, a shape factor, an elliptical form factor, an inner radius, an outer radius, a mean radius, an equivalent radius, an equivalent sphere volume, an equivalent prolate volume, an equivalent oblate volume, an equivalent sphere surface area, an average gray value, a total gray value, or an optical density; and

a computer readable storage medium for holding the codes.